

REMARKS

Applicant concurrently files herewith a petition (and fee) for three-month extension of time.

Claims 1-13 are pending in this Application. Applicant has amended claims 1, 2, 4, 6-9, and 13 to define the claimed invention more particularly.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-4, and 6-8 stand rejected under 35 U.S.C. §102(b) as being anticipated by Larson et al. (US 2003/0026229). Claims 5, 9-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Larson et al. (US 2003/0026229) in view of Hamilton et al. (US 2002/0176378).

Applicant respectfully traverses these rejections in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention (e.g., as defined by exemplary claim 1) is directed to a mobile communication network system.

The mobile communication network system includes a mobile communication network, a plurality of external networks, a plurality of mobile terminals, a plurality of gateways for connecting the external networks and the mobile communication network, and a plurality of radio access points for connecting the mobile terminals to the mobile communication network. When packets are transmitted and received between the mobile terminals, the packets are communicated by way of virtual networks that are provided to correspond to each of the external networks on the mobile communication network.

In a conventional mobile communication network system, as described in the Background of the present Application, tunnels are set between mobile terminals and the gateways with external networks, and all communication is realized by way of these tunnels. When communication is implemented between mobile terminals, packets transmitted by the

mobile terminals are transmitted to the gateways with the external networks by way of the tunnels, and then again returned to the mobile terminals of the communication partners from the gateways with the external networks by way of the tunnels (e.g., see Application at page 2, lines 6-12).

As a result this process, the technology of the conventional mobile communication network system suffers from problems like considerable delay of the packets and poor efficiency of circuit use due to wasted bandwidth within the mobile communication network (e.g., see Application at page 2, lines 13-15).

The claimed invention, however, provides a mobile communication network system includes a plurality of external networks and a plurality of gateways for connecting the external networks and a mobile communication network, wherein when packets are transmitted and received between the mobile terminals, the packets are communicated by way of virtual networks that are provided to correspond to each of the external networks on the mobile communication network (e.g., see Application at page 4, line 21 – page 5, line 4).

As a result of this arrangement, packets no longer need to be transferred by way of external network gateways, and the efficiency of circuit use of the access network is improved (e.g., see Application at page 5, lines 18-20).

II. THE PRIOR ART REJECTIONS

A. The 102(b) Larson et al. reference rejection

The Examiner alleges that Larson et al. teach claims 1-4 and 6-8. Applicant respectfully submits, however, that the alleged reference does not teach or suggest each and every feature of the claimed invention.

That is, Larson et al. does not teach or suggest, “a plurality of external networks; a plurality of mobile terminals; a plurality of gateways for connecting said external networks and said mobile communication network, and a plurality of radio access points for connecting said mobile terminals to said mobile communication network, wherein, when packets are transmitted and received between said mobile terminals, the packets are communicated by way of virtual networks that are provided to correspond to each of said external networks on said mobile communication network,” (emphasis added by Applicant) as recited in claim 1, and similarly recited in claims 2 and 6.

The Examiner alleges that Larson et al. teach the claimed mobile communication

network system. Specifically, the Examiner attempts to analogize gateways 40 and a public switched telephone network (PSTN) 20 in Larson et al. to the claimed gateways that are connected to a plurality of external networks.

The mobile communication network system of Larson et al., however, includes only one external network (PSTN 20) that is connected to the public mobile communication system 10 (paragraph 14; Fig. 1). Moreover, gateways 40 of Larson, et al. connect mobile switching center (MSC) to an IP network 60, and a virtual data trunk is dynamically established between each CRI 510 and/or MSC 110, 120, 130, through the IP network 60 as needed (paragraph 23; Fig. 2). This is different from, and fails to teach or suggest, a plurality of external networks, a plurality of gateways for connecting the external networks and the mobile communication network, wherein the packets are communicated by way of virtual networks that are provided to correspond to each of said external networks on the mobile communication network, as defined in the claimed invention. The teachings of Larson et al. do not met the plain language of the claimed invention and do not result in the present invention's outcome that eliminates the need to transfer the packets by way of external network gateways (e.g., see Application at page 5, lines 18-20).

Thus, instead of teaching or disclosing, *"a plurality of external networks; a plurality of mobile terminals; a plurality of gateways for connecting said external networks and said mobile communication network, and a plurality of radio access points for connecting said mobile terminals to said mobile communication network, wherein, when packets are transmitted and received between said mobile terminals, the packets are communicated by way of virtual networks that are provided to correspond to each of said external networks on said mobile communication network,"* (emphasis added by Applicant) as recited in claim 1, and similarly recited in claims 2 and 6, Larson et al. disclose gateways that connect a set of mobile switching centers to an IP network, wherein a virtual data trunk is dynamically established through the IP network.

Furthermore, Larson et al. teach that the private radio network (PWOS) 500 is connected to the mobile communication core network 100 using a virtual line of IP tunnel. Virtual lines are provided for every PWOS, and it is assumed that the external network is only PSTN 20 (Fig. 1).

On the contrary, in the claimed invention, virtual lines are provided for every external network that is connected to a mobile communication network, as recited in claim 1, as

similarly recited in claims 2 and 6. Therefore, if mobile terminals transmit/receive packets each to/from other mobile terminals, the communications are not performed through the external network. Indeed, Larson et al. has a different structure, is for a different purpose, and has many of the same deficiencies of the conventional systems, as described in the Background of the present Application.

Therefore, the Applicant respectfully submits that Larson et al. fail to teach or suggest each element of Applicant's claimed invention. Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

B. The 103(a) Larson et al. and Hamilton et al. reference rejection

In rejecting claims 5 and 9-13, the Examiner alleges that one of ordinary skill in the art would have combined Hamilton et al. with Larson et al. to render obvious the claimed invention. Applicant respectfully submits, however, that the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, Larson et al. and Hamilton et al. do not teach or suggest, "a plurality of external networks; a plurality of mobile terminals; a plurality of gateways for connecting said external networks and said mobile communication network...means for transferring packets that have been received from any of said sessions to a virtual network that has been prepared for an external network that corresponds to that session," (emphasis added by Applicant) as recited in independent claim 2, and similarly recited in independent claim 6.

Larson et al., as set forth above in section A, fail to teach or suggest the claimed invention.

Moreover, Applicant submits that Hamilton et al. fail to make up the deficiencies of Larson et al.

Indeed, Hamilton et al. disclose a packet filtering service and a network based firewalls (paragraph 95). Hamilton et al., however, are silent about, and fail to teach or suggest, "a plurality of external networks; a plurality of mobile terminals; a plurality of gateways for connecting said external networks and said mobile communication network...means for transferring packets that have been received from any of said sessions to a virtual network that has been prepared for an external network that corresponds to that session," (emphasis added by Applicant) as recited in independent claim 2, and similarly recited in independent claim 6.

Indeed, the Examiner does not even allege that Hamilton et al. teach or suggest these features. The Examiner merely relies on Hamilton et al. for allegedly teaching a control/management network (e.g., see Office Action at page 9, line 16 – page 10, line 9).

Since Hamilton et al. do not overcome the deficiencies of Larson et al., the combination of references fails to render the rejected claims obvious.

Furthermore, Applicant submits that the Examiner has failed to show the motivation to combine each alleged feature of Hamilton et al. with teachings of Larson et al. (e.g., see Office Action at page 10, lines 13-17). The Examiner merely refers to means for refusing of Hamilton and fails to address the other missing features of Larson et al., such as means for control and management, and packets for control and management that allegedly are disclosed in Hamilton et al.

Moreover, Applicant submits that the alleged packet-filtering in paragraph 95 of Hamilton et al., upon which the Examiner bases his rejection, is different from the packet-filtering that is performed among virtual networks that correspond to external networks in the claimed invention. Therefore, Hamilton, et al. fails to teach or suggest the packet-filtering as recited in claims 5 and 9-13.

Therefore, Applicant respectfully submits that Larson et al. in view of Hamilton et al. does not teach or suggest (nor render obvious) each and every feature of the claimed invention. Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

The Examiner has erroneously cited Isomaki et al. as the inventors for US 2003/0026229 (see Office Action at page 7, section 5, lines 2-3). Indeed, Hamilton et al. are the reference's inventors.

In view of the foregoing, Applicant submits that claims 1-13, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

Serial No. 10/512,144
Docket No. NEC03P013-Sib

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 06.26.08

Farhad Shir
Farhad Shir, Ph.D.
Registration No. 59,403

Sean M. McGinn, Esq.
Registration No. 34,386

**MCGINN INTELLECTUAL PROPERTY
LAW GROUP, PLLC**
8321 Old Courthouse Road, Suite 200
Vienna, Virginia 22182-3817
(703) 761-4100
Customer No. 21254